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Ardashev, B. I. and B. A. Tertov. Synthesis of Lepidine Bases from Acetanilines and Oxo Compounds - 1781.

Ardashev, B. I. and V. I. Minkin. Synthesis of 6-Methoxyquinoline - 1949.

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Atanasyants, A. G., N. T. Kudryavtsev and V. M. Karataev. Hard Gold Plating - 926.

Atroshchenko, V. I. and N. A. Gavria. Influence of Inert Gases on the Synthesis of Ammonia - 1809.

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Bogdanova, A. V., M. F. Shostakovskii and G. I. Plotnikova. Removal of Phenols from Tar Waters by Means of Vinyl Ethers - 1942.

Bogdanov, M. I., see Bondarenko, A. V.

Bogorodskaya, L. P., see Iskoldsky, I. I.

Bogoyavlensky, P. S., see Sukmanskaya, G. V.

Bogoiavlenskii, A. F. and A. P. Vedernikov. Use of Radioactive Isotopes in Investigation of the Kinetics of Accumulation of Electrolyte Ions (SO_4'') in Anodic Al_2O_3 Films - 1938.

Bolotov, B. A., B. N. Dolgov and N. P. Usacheva. Catalytic Decomposition of Isobutyl Isobutyrate and Isoamyl Isovalerate - 1296.

Bolotov, B. A., K. P. Katkova and S. B. Izraileva. Catalytic Conversion of Primary Alcohols of Iso-Structure into Ketones. Communication VI - 127.

Bolotov, B. A. and N. A. Rozenberg-Marshova. Catalytic Conversion of a Mixture of Primary Alcohols of Iso-Structure into Ketones - 291.

Bondarenko, A. V., M. I. Bogdanov and M. I. Farberov. Investigation of the Dehydrogenation of Ethyltoluene to Vinyltoluene - 975.

Bondarenko, A. V., M. I. Bagdanov and M. I. Farberov. Study of the Conditions of Alkylation of Toluene with Ethylene - 822.

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Brodskaya, N. I., M. I. Gerber, V. P. Teodorovich and A. D. Shusharina. Regeneration of Oxythioarsenate Solutions - 1653.

Budnikov, P. P. Forty Years of Soviet Science in the Field of Silicate Chemistry and Technology - 1497.

Budnikov, P. P. and I. L. Znachko-Iavorskii. Granulated Blast-Furnace Slags and Slag Cements. Industrial Construction Press, Moscow, 1953, 224 pp. (Book Review) - 1953.

Budnikov, P. P. and Kh. O. Gevorkyan. Porcelain (Introduction to its Technology) - (Book Review) - 349.

Budnikov, P. P. and R. D. Azelitskaya. Influence of Small Quantities of Certain Additives on the Cementing Properties of γ-Dicalcium Silicate (γ-C_2S) - 161.

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Chertkov, B. A. Oxidation of Ammonium Sulfite–Bisulfite Solutions - 1564.

Chertkov, Ia. B. and V. N. Zrelov. The Autooxidation of Kerosenes from the Cracking Process - 1946.

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Chivikova, A. N. The Reaction of Tetraethoxysilane with Aluminum Glycerate - 481.

Chochieva, M. M. and N. I. Nikitin. A Study of the Chemical Properties of Dioxane Lignin from Oak and Certain Conifers - 1887.

Choporov, Ya. P. and O. A. Tishchenko. Production of Chloroform and Carbon Tetrachloride by Chlorination of Methane over a Moving Heat-Transfer Medium - 663.

Chudakov, M. I., see Krasnova, A. P.

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Drinberg, A. Ia. and A. D. Iakovlev. Preparation and Study of the Properties of Space Polymers of Alkyl Acrylates and Alkyl Methacrylates- 1275.
Drinberg, A. Ya., N. S. Demchenko, O. N. Setkina and N. M. Gopshtein. Studies of the Conversion of Saturated Carbon Chain Polymers. Communication 4. Spectroscopic Investigations, in the Infrared Region of Polymethylene and the Products of its Conversion into a Three-Dimensional Polymer - 117.
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Efremova, O. G., I. K. Kosyreva, A. F. Kondrashova and S. A. Glikman. Influence of Metal Ions on the Properties of Ethylcellulose. Communication V. The Quantity of Carboxyl Groups in Ethylcellulose and their Influence on the Mechanical Properties - 139.
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Filatov, I. G., I. A. Egorov. Foalite and its Applications in the Chemical Industry. Goskhimizdat, Moscow, 1956 -(Review) - 871.
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Frantsevich-Zabludovskaya, T. F. and A. I. Zayats. Investigation of Cathodic Polarization in Electrodeposition of Nickel Tungsten Alloys - 764.

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Ianitskii, I. V. and B. B. Stul'pinas. The Electrodeposition of Manganese - 1845.
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Kniga, M. V., T. M. Vasil'eva and K. P. Mishchenko. The Possibility of Estimation of the Specific Surface of Kukersite Shale from its Heats of Interaction with Liquids - 1934.
Kobozev, N. I., see Terekhova, M. G.
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Kogan, V. B. On the Comments of I. N. Tsiparis [1] Concerning the Paper by V. V. Kafarov and L. A. Gordievsky "Basic Principles of the Choice of a Solvent for the Separation of Azeotropic Systems by the Extractive Distillation Method" - 535.
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Kogan, V. B. and V. M. Fridman. Determination of the Composition of Three-Component Systems by Measurement of a Single Property - 1217.
Kogan, V. B., V. M. Fridman and I. V. Deizenrot. Azeotropic Mixtures Formed by Aliphatic Alcohols, Normal Paraffins and Water - 1409.
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Shpunt, S. Ya. and F. E. Mostovich. The Isotherm at 25° for the Quaternary System $MgO - P_2O_5 - H_2SiF_6 - H_2O$. (Removal of Magnesium Salts from Wet-Process Phosphoric Acid) - 409.
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Tseitlin, Kh. L. and V. A. Strunkin. Effect of Air Concentration on the Corrosion of Aluminum by Chlorine at High Temperatures - 1860.
Tseitlin, Kh. L., L. V. Merzloukhova and V. A. Strunkin. Corrosion of Metals in Hydrogen Sulfide at High Temperatures - 1618.
Tsyskovsky, V. K., E. M. Nebylova and Ts. N. Shcheglova. Kinetic Relationships in the Oxidation of Liquid Paraffinic Hydrocarbons - 529.

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